#### **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

#### **CLAIM LISTING:**

1. (Currently Amended) A proton conduction material comprising:

a polymer material which has a molecular structure having a main chain and a side chain grafted on the main chain and at least partially including, at the ends of the grafted chains, an end structure expressed by a formula shown below, and which has a strong acid functional group in the molecular structure,

where R1, R2 and R3 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical.

2. (Original) The proton conduction material according to claim 1, wherein R1, R2 and R3 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

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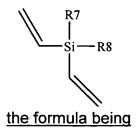
- 3. (Original) The proton conduction material according to claim 1, wherein the strong acid functional group is a sulfonic acid functional group.
- 4. (Currently Amended) A proton conduction material comprising: a polymer of a mixture polymer derived/prepared from a mixture, which contains a monomer having a vinyl radical and a monomer expressed by a formula shown below and whose molecular structure has a strong acid functional group,

the formula being

where R4, R5 and R6 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical; and

## further comprising:

a monomer expressed by a formula shown below,



where R7 and R8 are independent of each other and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical.

- 5. (Original) The proton conduction material according to claim 4, wherein R4, R5 and R6 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.
- 6. (Original) The proton conduction material according to claim 4, wherein the strong acid functional group is a sulfonic acid functional group.
  - 7. (Cancelled).
- 8. (Currently Amended) The proton conduction material according to claim [[7]]4, wherein

R7 and R8 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

- 9. (Original) The proton conduction material according to claim 4, wherein the monomer having the vinyl radical contains styrene, and the strong acid functional group is introduced into a phenyl radical originating from the styrene.
  - 10. (Original) The proton conduction material according to claim 4, wherein

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the monomer is vinyl triethylsilane, vinyl tris (trimethylsiloxy) silane, and/or vinyl-t-butyldimethylsilane.

11. (Currently Amended) A method of manufacturing a proton conduction material, comprising the steps of:

grafting a side chain on a main chain such that a molecular structure at least partially including, at the end of the grafted chain, an end structure expressed by a formula shown below is obtained.

introducing a strong acid functional group into the molecular structure, the formula being

where R1, R2 and R3 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical.

12. (Original) The method according to claim 11, wherein
R1, R2 and R3 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluromethyl radical, and a pentafluorophenyl radical.

- (Original) The method according to claim 11, wherein
   the strong acid functional group is a sulfonic acid functional group.
- 14. (Currently Amended) A method of manufacturing a proton conduction material, comprising the step of:

introducing a strong acid functional group into a molecular structure containing a monomer having a vinyl radical and a monomer expressed by a formula

shown below,

the formula being

where R4, R5 and R6 are independent of one another and represent a hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy radical; and

further comprising the step of:

introducing a monomer expressed by a formula shown below,

where R7 and R8 are independent of each other and represent a

hydrocarbon radical, a fluoro-substituted hydrocarbon radical, or a trimethylsiloxy

radical.

15. (Original) The method according to claim 14, wherein

R4, R5 and R6 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a 1-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.

- (Original) The method according to claim 14, wherein
   the strong acid functional group is a sulfonic acid functional group.
- 17. (Cancelled).

- 18. (Currently Amended) The method according to claim [[17]]14, wherein R7 and R8 in the formula are selected from a methyl radical, an ethyl radical, a propyl radical, a t-butyl radical, a phenyl radical, a trimethylsiloxy radical, a trifluoromethyl radical, and a pentafluorophenyl radical.
- 19. (Original) The method according to claim 14, wherein the monomer having the vinyl radical contains styrene, and the strong acid functional group is introduced into a phenyl radical originating from the styrene.
- 20. (Original) The method according to claim 14, wherein the monomer is vinyl triethylsilane, vinyl tris silane, and/or vinyl-t-butyldimethylsilane.